

REMARKS

In the Official Action, the Examiner continued to assert a single rejection of all of the claims under 35 U.S.C. § 103(a) over the combination of Lam, U.S. Patent No. 3,615,480, and newly cited Suzuki et al., U.S. Patent No. 5,532,116. The Examiner again conceded that Lam does not specify the claimed nonionic aromatic ether surfactant, but relied on Suzuki et al. to show the claimed surfactant.

By the present Amendment, a minor typographical error has been corrected in the specification and claim 1 has been amended to use more standard U.S. practice language and to include the subject matters of original claims 4 and 5. Applicants respectfully submit that the amended claims are patentable over the cited combination of patents and that the rejection is improperly based on applicants' own specification. Applicants further assert that even if a proper basis for combining the patents exists, the combination would still not result in the present invention or lead to a recognition of the advantages which can be obtained therefrom.

As explained in detail in the specification, by using the developer of the present invention, one can dissolve or disperse compounds developer-insoluble compounds over a long period of time thereby improving printing stability and durability (see page 5, lines 17-23). The improved results which can be attained in accordance with the developer of the present invention are demonstrated by the illustrative Examples starting on page 56 and particularly in Tables 5 and 6 on pages 70 and 71. The Comparative Examples show that inferior results are obtained when a developer outside the claims is used. In this respect, it will be noted that

Comparative Developer No. 3 does not use the defined nonionic compound and provides scumming and sludge.

The cited prior art does not teach the presently claimed invention and does not recognize the substantial advantages which can be attained therefrom. In particular, Lam discloses an aqueous developer comprising an alkali metal silicate having a silica to alkali metal oxide ratio greater than 1.5 and one or more water-miscible organic solvents, having a pH of 10.0 to 13.0 and capable of removing all the unexposed areas of a photopolymerizable layer containing an ethylenically unsaturated monomer. As noted in the passage beginning at column 2, line 71, the organic solvent is preferably used to dissolve the photopolymerizable material. There is no requirement of a surfactant and absolutely no requirement of a nonionic compound of formula (I) as recited in claim 1, but surfactants are generally mentioned at column 6, lines 16-18. Triton X-100 is used in the developer set forth at the top of column 5 and the chemical name for this material is recited in dependent claim 6. It will be recognized that Triton X-100 does not meet the nonionic compound of formula (1) of claim 1.

The Examiner has conceded that Lam does not specify the claimed nonionic compound, but has relied on Suzuki et al. to show the claimed compound. Suzuki et al. discloses an aqueous alkaline developing solution containing a combination of an anionic surface active agent having defined formula (II) or defined formula (III) (which are both alkylnaphthalene sulfonate salts) and a nonionic surface active agent having a polyoxyethylene moiety and an aromatic ring in its structure which is preferably polyoxyethylene alkylphenyl ether (i.e., having an alkylbenzene ring) or

polyoxyethylene naphthyl ether (i.e., having a naphthalene ring), and more preferably polyoxyethylene naphthyl ether. The developing solution is said to shorten the developing time of a light-sensitive image forming material and prevent an image formed on the light-sensitive image forming material (on a support or a peel layer) from the occurrence of fog and is further said to exhibit excellent developing characteristics if the developing solution freezes, is thawed and then is used. Of the surfactants used in the examples of Suzuki et al., surfactant (C-1) is a polyoxyethylene alkylphenyl ether illustrated at column 20, lines 47-51 and surfactant (C-2) is a polyoxyethylene naphthyl ether illustrated at the bottom of column 20 which has a total of 4 ethoxy units.

Applicants respectfully maintain that the developing solutions of Lam and Suzuki et al. are so substantially different that those of ordinary skill in the art would not combine the respective teachings. The developing solution of Lam requires an organic solvent, an alkali metal silicate and a defined silica to alkali metal oxide ratio. In contrast, the developing solution of Suzuki et al. does not contain an organic solvent, and does not require an alkali metal silicate. Indeed, none of the exemplified developing solutions of the patent includes an organic solvent or an alkali metal silicate. Conversely, the developing solution of Suzuki et al. requires an anionic surface active agent having the defined formula (II) or the defined formula (III) which are alkynaphthalene sulfonate salts which are not present in the developing solutions of Lam. Furthermore, the developing solution of Lam does not require a surfactant and certainly not a specific type of surfactant.

Those of ordinary skill in the art cannot ignore the substantial differences between the disclosed developers of Suzuki et al. and Lam and would not attempt to apply the teachings relating to the developing solution of one to the other because of the noted substantial differences. Furthermore, even if there was some proper basis for combining the respective patents (which applicants in no way concede exists), it still would not lead to the present invention. As explained above, Suzuki et al. describes the importance of the defined anionic surface active agent having the defined formula (II) or the defined formula (III) which are alkylnaphthalene sulfonate salts. Therefore, if one were going to try to combine the teachings of the respective patents (and applicants again point out that "obvious to try" is not the standard under §103), one would first be led to using the defined alkylnaphthalene sulfonate salts. In addition, one would be led to the specific material used in the Examples and illustrated at the bottom of column 20. However, this material does not meet the recitation in claim 1 which defines a repeating polyoxyethylene chain of 5 to 30 units. In this regard, the Examiner cannot rely on the results of Table 1 in the Action (see the bottom of page 2) and then ignore the specific compounds used to obtain the results that are relied on. Accordingly, those of ordinary skill in the art would be led by the specific compounds used in the Examples more than by the general description provided in column 9 of Suzuki et al.

As yet a further important deficiency, neither Lam nor Suzuki et al. in any way recognizes the effectiveness of the developer of the present invention in dissolving or dispersing compounds leading to sludge, which is a substantial advantage that has been demonstrated in the aforementioned Examples in the specification.

Accordingly, the total absence of any appreciation of this substantial advantage which can be attained pursuant to the present invention is further evidence supporting the patentability of the invention that cannot be ignored.

For all the reasons provided above, applicants respectfully submit that the claims of record are patentable in all regards and therefore respectfully request reconsideration and allowance of the present application.

Should the Examiner wish to discuss any aspect of the present application, the Examiner is invited to contact the undersigned attorney at the number provided below.

Respectfully submitted,

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Date: April 25, 2006